TACTICAL REMOTE SENSOR SYSTEMS SYSTEM-OF SYSTEMS (TRSS SOS)

DESCRIPTION

The Tactical Remote Sensor Systems (TRSS) System-of-Systems (SoS) program provides unattended sensors, retransmission systems, and sensor monitoring systems. TRSS are deployed and operated by Ground Sensor Platoons in support of the commander's intelligence collection effort. Once deployed, the remote systems operate autonomously, providing continuous, unattended surveillance of distant areas of the battlespace. TRSS is frequently employed to provide surveillance and reconnaissance in places where it is too dangerous to maintain personnel or not tactically practical to deploy other surveillance systems. Remote sensors use multiple sensing modalities and radio communications methods to detect and report personnel and vehicle activity in designated areas of interest. All sensors are passive; detection is accomplished when target-generated energy is sensed. Current detection modalities include seismic, acoustic, magnetic, and imaging (thermal and electro-optical). Future modalities will include radio frequency, ultra-wide band, and electromagnetic.

OPERATIONAL IMPACT

TRSS enables commanders to continuously monitor areas of interest without leaving Marines in high risk locations. The information provided by the sensors can be used to cue higher level surveillance systems (such as unmanned aerial systems) and gathered by Intelligence Analysis Systems for further analysis. The program executes an incremental acquisition strategy to continuously improve the system's capability to discriminate target activity and report relevant targets in a timely manner.

PROGRAM STATUS

TRSS is a post milestone C program (production and deployment phase) and is currently undergoing a technology refresh which will enhance the current capabilities of the existing Standard Operating Procedures. These enhancements include longer range imagers, improved, networked communications, and up-armored mobile monitoring stations that have a smaller footprint. The fielding plan for TRSS was recently increased from 23 to 33.

Procurement Profile:	FY2008	FY2009
Quantity:		
Thermal Imagers	344	20
Electro-optical Imagers	344	20
Mobile Monitors	21	0
Sensor Sets	10	11
Hand Held Programmer	40	0
Radio Repeaters (Relay)	130	429
Maintenance Kits	3	0

Developer/Manufacturer:
L-3 NOVA Engineering, Cincinnati, OH
L-3 Communications East Camden, NJ
SPAWAR Systems Center, Charleston, SC
Apogen-QinetiQ North America, Carlsbad, CA